

November 11, 2004

Cheri Peele  
Department of Ecology  
PO Box 47600  
Olympia, WA 98504

Dear Ms. Peele:

Thank you for this opportunity to comment on the draft Washington State PBDE Chemical Action Plan. Washington Citizens for Resource Conservation (WCRC) is a non-profit advocacy group working to keep Washington a leader in recycling and waste reduction. For the past few years, WCRC has focused on electronics recycling and extended producer responsibility, and we have become increasingly concerned about the use of brominated flame retardants in electronics and other products.

As a member of the Computer TakeBack Campaign (CTBC), WCRC participated in CTBC and Clean Production Action's analysis of dust samples wiped from computers. Brominated flame retardants, including Deca-BDE, were found in all of the 16 samples including the two from college computer labs in Washington State.

WCRC appreciates the thoughtful approach the Department of Ecology and the Department of Health have taken in drafting the PBDE Plan. We ask that the Plan be further strengthened in order to protect human and environmental health. The following are WCRC's specific comments and recommendations:

- 1) WCRC strongly supports your recommendation to **ban the manufacture, distribution, or sale of new products containing Penta-BDE and Octa-BDE** in Washington State by 2006.
- 2) The Departments of Ecology and Health should recommend a **ban on the manufacture, distribution and sale of all new products containing Deca-BDE** in Washington State.

WCRC believes that your current recommendation to ban Deca-BDE in electronics and electrical equipment and upholstered fabric should be expanded to all products. As stated in the draft Plan, "There is a weight of evidence suggesting that Deca-BDE breaks down into more bioaccumulative compounds" (page 60). It is also building up in wildlife, our food, and our bodies. This evidence raises serious concerns regarding Deca-BDE and points to the need for a comprehensive ban.

While WCRC appreciates your consideration of whether safer alternatives to the use of Deca-BDE are available, industry's response to the European Union's Restriction on Hazardous Substances (RoHS) Directive clearly shows that bans drive innovation on alternatives and material substitution. RoHS created the level playing field necessary for companies to research and develop alternatives to PBDEs in electronics. A ban on Deca-BDE in all products in Washington State would help catalyze the research and development of alternatives to Deca-BDE in all uses.

- 3) The **ban on Deca-BDE should become effective by 2006**. As stated in the Plan, “Each additional year that PBDE products are produced and sold will extend that timetable – and any related costs – by a decade or more” (page iv).
- 4) As stated above, WCRC believes there should be a comprehensive ban on Deca-BDE in all products. However, if Ecology and DOH decide to limit their recommendation on Deca to electronic and electrical equipment and upholstered fabric, we recommend that **the list of covered electronic and electrical products be the list adopted by the European Union**.
- 5) WCRC supports the recommendation to establish a process to **examine current disposal and recycling practices and determine reasonable end-of-life procedures that are protective of human health and the environment**. However, we would like to see this process begin immediately and be completed on a quicker timeline. End-of-life issues are extremely important and have not yet been adequately examined. Steps must be taken to ensure that materials containing PBDEs are separated at end-of-life and not put into new products. Information is needed on how best to isolate and contain PBDEs.
- 6) Products containing PBDEs should not be incinerated. PBDEs are similar to PCBs, which cannot be burned in solid waste incinerators. Burning PBDEs can create dioxins and furans, chemicals that are known to cause health problems in humans and wildlife. Even state-of-the-art incinerators can have equipment failures and temperature control problems. We therefore recommend that the Plan include a recommendation to **ban incineration of products containing PBDEs**.
- 7) If Deca-BDE is not banned in all uses by 2006, **products containing Deca should be labeled**. Labeling would provide information needed for consumers to make informed choices about purchasing products until a ban is in place. Labeling would also assist electronics recyclers, who face significant challenges in identifying the presence of PBDEs in plastics.
- 8) The State should lead by example. **General Administration and other state agencies should specify that goods purchased on state contracts not contain any PBDEs, including Deca-BDE**.
- 9) The monitoring and research section should include a recommendation to **research the fate of PBDEs in solid waste incinerators and other burn facilities**. This should include testing incinerator air emissions and ash for PBDEs as well as brominated dioxins and furans.
- 10) An earlier list of possible actions included **establishing an institute in the Washington State university system for research and development of “clean” product design and production**. WCRC strongly supports including this recommendation in the Plan. As we move away from throwing products into “graves” and toward “cradle-to-cradle” thinking, the focus will move from wastes to products. Technical and research expertise on product design, including safe alternatives to toxic and persistent chemicals, will be needed.

11) In the section of the draft Plan on end-of-life recommendations (p. 57), the fourth bullet under #3 could be interpreted to mean that solid waste disposal facilities safely contain PBDEs. However the draft Plan states that, “Under WAC . . . most products containing PBDEs would probably be considered hazardous waste at end-of-life” and “It is unknown whether the current system for disposing of and recycling products containing PBDEs adequately protects human health and the environment” (page 56). The purpose of recommendation #3 is to evaluate and recommend end-of-life management that protects human health and the environment. We therefore recommend changing the fourth bullet to read: “Allowing the disposal of products containing PBDEs in waste disposal if and where it is determined that they will be safely contained.”

12) The draft Plan states, “Results for the latter three watersheds probably represent background for PBDEs in local freshwater fish” (page 29, second paragraph). Since PBDEs do not exist naturally, what is meant by “background” in this statement?

Thank you for this opportunity to comment and for your good work on the Plan. Please feel free to contact me if you need any clarifications.

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